

west virginia department of environmental protection

Division of Land Restoration 601 57th Street SE Charleston, WV 25304 Phone: 304-926-0455 Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary dep.wv.gov

January 22, 2014

Environmental Management Support, Inc. Attn: Mr. Don West 8601 Georgia Avenue, Suite 500 Silver Spring, MD 20910

Re: West Virginia Department of Environmental Protection FY2014 EPA Brownfields Site-Specific Hazardous Assessment Grant Application

Dear Mr. West:

The West Virginia Department of Environmental Protection's Division of Land Restoration (DLR) is pleased to submit this proposal to the United States Environmental Protection Agency for a 2014 EPA Site-Specific Brownfields Hazardous Substance's Assessment Grant.

On January 9, 2014, a chemical spill of 4-Methylcyclohexane Methanol (MCHM) was confirmed to have contaminated the Elk River of West Virginia, immediately outside Charleston. This environmental catastrophe made the water of 3000,000 residents in nine West Virginia counties undrinkable for more than one week. Approximately 7,500 gallons leaked from the Freedom Industries facility on the Elk River 1.6 miles upstream from the drinking water intake of West Virginia American Water. MCHM is known to be a skin, eye, and lung irritant.

In the aftermath of this environmental disaster, residents, lawmakers, and agency officials are working to evaluate the extent of contamination and the potential for long-term impacts on the environment and citizens. The Elk River Brownfields Hazardous Assessment Grant Program is focused on assessing contaminated areas along the Elk River and providing ongoing health monitoring for the 300,000 residents whose water supply was impacted by this chemical leak. With the effects of the leak stretching between nine counties and a multitude of small communities, the WVDEP is a clear choice to oversee assessment across municipal and county boundaries.

The EPA's support is vital to the success of the assessment of communities along the Elk River impacted by the MCHM leak and the real health, environmental, and economic threats posed to an already economically distressed area of West Virginia.

Required applicant identification and application details are provided as follows:

a. Applicant Identification:

West Virginia Department of Environmental Protection Division of Land Restoration (DLR) 601 57th Street SE Charleston, WV 25304

- b. Applicant DUNS Number: 927351346
- c. Funding Requested:
 - i. Grant Type: Assessment

ii. Federal Funds Requested: \$350,000iii. Contamination Type: Hazardousiv. Assessment Area: Site-specific

- d. **Location:** This proposal would serve the entire nine West Virginia Counties impacted by the chemical spill on the Elk River that contaminated the water.
- e. Property Name and Address: The Elk River
- f. Contacts:

Project Director

Patricia A. Hickman, Interim Director Division of Land Restoration (DLR) WV Department of Environmental Protection 601 57th Street SE

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Chief Executive Official

601 57th Street SE

Charleston, WV 25304

Phone: 304-926-0440

Randy Huffman, Cabinet Secretary

WV Department of Environmental Protection

- g. Date Submitted: January 22, 2014
- h. **Project Period:** 3 Years
- i. **Population:** State of West Virginia is 1,855,413; population of 9 county area (Kanawha, Cabell, Boone, Putnam, Lincoln, Logan, Clay, Roane, and Jackson Counties): 531,439; target area population (Kanawha County) is 192,179, Charleston: 51,018 (U.S. Census 2012 estimates)
- i. "Other Factors" Checklist: The "Other Factors" Checklist is attached.

Sincerely,

Patricia A. Hickman, Interim Director WVDEP, Division of Land Restoration

Enclosure

Cc: Tom Stolle, EPA Region 3 (with enclosure)

Narrative Application

1. Community Need

a. Targeted Community and Brownfields

i. <u>Targeted Community Description</u>

This application is for assessment funding for the nine West Virginia counties affected by the January 9th chemical leak along the Elk River: Kanawha, Boone, Cabell, Jackson, Clay, Roane, Putnam, Lincoln, and Logan counties. However, efforts will be concentrated at the point of leak in Charleston, West Virginia. This area is commonly referred to as the Kanawha or "Chemical" Valley due to the strong presence of chemical industries along and near the Kanawha River.

West Virginia is located in the east-central section of the United States, comprising 24,000 square miles of predominantly mountainous terrain. The population is approximately 1.8 million, with a population density of approximately 75 per square mile. Population densities of less than 10 people per square mile exist in many areas of the state. West Virginia experienced a significant industrial expansion in the late 19th century due to its abundant natural resources, especially bituminous coal. Coal mining and associated industries like railroads experienced huge growth in the late 1800s and early 1900s, creating many small towns that followed mining expansion. The state also had extensive timber operations across the highly forested state which was a second large contributor to the state's economy at that time.

The Kanawha Valley sits in south-central West Virginia and houses the state's capital city, Charleston. In the early 19th century, the area prospered from the discovery of salt brines along the Kanawha River, and the top salt producer of the world could be found in an area adjacent to the capital city. After being selected as the state capital, the city of Charleston and adjacent communities flourished not only from an expanding political and government industry but also from the rich natural resources in the area, including natural gas and coal.

In the early 1900s, the Kanawha Valley experienced the development of a large chemical industry, founded during World War I when many chemicals originating overseas could no longer be imported, with additional expansion during World War II. Steel mills and glass plants were also present across West Virginia during this time, due in part to the state's extensive natural gas and coal resources.

Both World Wars brought unprecedented boom periods to the coal mines and the steel mills. The Great Depression in the 1930s brought significant economic difficulties to the region. Tremendous changes occurred after World War II. During the 1950s economic weakness in the coal industry, combined with mechanization and automation that enabled mines to operate at higher efficiency with fewer employees, were the chief factors in bringing about record unemployment rates in the state. As a result, the state's population decreased drastically, declining 7.2% from 1950 to 1960 and another 6.2% from 1960 to 1970.

In the 1970s, West Virginia's coal-based economy strengthened as energy prices rose dramatically. However, energy prices fell in the 1980s and employment in the coal mines rapidly declined as West Virginia suffered through one of the worst economic periods in its history. By 1983 the state's unemployment rate had risen to 21% with a huge decline in manufacturing -based jobs. As a result, West Virginia lost more of its population, declining 8% from 1980 to 1990.

Since 1990, the population of West Virginia has only risen by approximately 3%, indicative of an enduring stagnant economy.

The growth boom that occurred during our historic industrial past has radically declined, leaving our economy suffering. Companies closing facilities to relocate overseas continue to plague our state. Many small, rural towns that were once vibrant communities now contain empty businesses, including many former gas stations, automotive repair shops, and other similar local businesses. Our industrial past has left us with contamination and blight in many areas where these small rural communities are located. Thousands of brownfield properties are found within our state borders.

On January 10, 2014 a chemical spill of 4-Methylcyclohexane Methanol (MCHM), was confirmed to have contaminated the Elk River of West Virginia, just outside Charleston. This environmental catastrophe made the water of 300,000 residents in nine West Virginia counties undrinkable for more than one week. Approximately 7,500 gallons leaked from the Freedom Industries facility on the Elk River 1.6 miles upstream from the drinking water intake of West Virginia American Water. This chemical is an organic compound classified as an alcohol which generates bubbles in the froth floatation process to help clean coal impurities. MCHM is known to be a skin, eye, and lung irritant.

As residents of the nine affected counties are finally able to use their water, questions of the long-term impacts of this event remain. Testing of the Elk River at the source of the leak, the soil near the compromised tank, and water throughout the water distribution system is till underway. Less than two weeks after the spill, the responsible party, Freedom Industries, filed for bankruptcy, leaving many to question how assessment and cleanup after this disaster can be funded. While the remediation burden at the site clearly fails on the polluter, Freedom Industries, off-site assessment of property and water in communities impacted by the soil have no clear course of action to mitigate real and perceived risk.

Outside of Charleston, the location of the leak site, many of the small towns and neighborhoods that dot the rural landscape of these nine counties consist of low- to moderate-income communities and include pockets of minority and at-risk populations which are disproportionately impacted by blight and poverty. These isolated neighborhoods are currently in a state of serious economic deprivation. Many residents are unemployed, and those who are employed generally hold low wage or part-time jobs without insurance or opportunity for advancement.

Today, the citizens of these rural West Virginia communities and neighborhoods are faced with contamination left not only by the recent environmental disaster at Freedom Industries, but also by the former industrial economy and the perception of contamination caused by many years of occupation by industry. In order for the citizens of these small towns and neighborhoods to live in healthy, safe and productive communities, sites like the Elk River leak site must be assessed to either remove the perception of ongoing contamination or to clean up the existing contamination.

ii. <u>Demographic Information</u>

The following table provides demographic information on our target area of Charleston and Kanawha County, plus state and national statistics for comparison. Although nine counties were affected by the spill, Charleston and Kanawha County have been selected as example populations, as the location of the spill was in this area and felt the greatest impact of the

contamination of the site and adjacent Elk River. Additionally, Kanawha County the composition of the Kanawha County population is comparable to that of the other eight counties. While the unemployment rate in Kanawha is lower than that of the state and nation, the Kanawha County rate is closer to the State and National averages. The income levels, however, though higher than West Virginia, are lower than the median household income for the nation. Although population in West Virginia and the United States increased from 1990 to 2012, Charleston and Kanawha County both saw a decline in population in the same time period.

	Charleston	Kanawha	West Virginia	USA
		County		
Population:	51,018	192,179	1,855,413 1	308,745,538 ²
Population Change from	-10.9%	-7.4%	+3.34%	+19.45%
1990 to 2012				
Unemployment:	$4.9\%^3$	$6.4\%^{3}$	6.2% 1	$7.2\%^{3}$
Poverty Rate:	18.5% 1	14.2% 1	28.3% ¹	15.1% 4
Percent Minority:	21.6% 1	11% 1	6.1% ¹	26.7% ³
Median Household	\$47,582 ¹	\$45,642 ¹	\$39,550 ¹	\$49,445 ¹
Income:				
Per Capita Income:	\$35,341 1	\$27,415 ¹	\$22,0101	\$27,915 ¹

¹Data from 2012 U.S. Census "Quickfacts" data estimates (http://quickfacts.census.gov)

iii. Brownfields

The Kanawha River Valley and surrounding counties in the target area has been a nucleus of world renowned chemical manufacturing, including a plethora of chemicals and products like chlorine, acids, fertilizers, petro-chemicals, ethylene, rayon and synthetic rubber compounds for more than 100 years. The extensive numbers and size of properties contaminated by these manufacturing processes, or at least perceived to be contaminated, are prominent throughout the valley. Past land uses of these sites include a wide variety of chemical manufacturing, storage, and transportation facilities.

In addition to existing brownfields in the target area, many off-site properties have become contaminated and potentially contaminated due to the chemical spill on January 9th, 2014. These sites have varied histories and little/no known information of previous site activities or current conditions, although many of the potentially contaminated sites are currently abandoned, with building vacant and dilapidated and little or no site maintenance. Because of this unknown status and lack of responsibility there are a number of real and perceived negative environmental impacts associated with these brownfield properties. Real and perceived impacts of this incident include risks of air, water, and soil contamination as well as the perception and fear of drinking water contamination and health and safety risks for all individuals living and working nearby these effected sites.

²Data from the 2010 U.S. Census data, available at http://www.census.gov/

³Data from the Bureau of Labor Statistics, available at www.bls.gov

⁴Data from the 2010 American Community Survey, available at

http://www.census.gov/newsroom/releases/archives/income wea lth/cb11-157.html

iv. <u>Cumulative Environmental Issues</u>

The Charleston Metropolitan Area is known as the Chemical Valley. One of the reasons that the water plant was built on the Elk River in the 70s was due to the substantial industry and the associated pollution on the Kanawha River at the time.

This area also includes three interstate systems which are becoming more and more congested, especially due to over-the-road transport trucks and increasing tourism traffic. This high level of vehicular traffic contributes to ozone, particulate concentrations, and related air pollution concerns associated with vehicle exhaust.

b. Impacts on Targeted Community

Contamination at the Elk River spill site has already had a significant impact on the surrounding communities, with 300,000 residents unable to use their water for one week and pregnant women being advised by the Centers for Disease Control to continue to use bottled water as a precaution. Because there is still little information about the long-term effects of MCHM, the potential for additional impact on communities is unknown.

The Elk River site is just a single example of the impact of the Kanawha Valley's status for more than 100 years as a nucleus of world renowned chemical manufacturing, including a plethora of chemicals and products like chlorine, acids, fertilizers, petro-chemicals, ethylene, rayon and synthetic rubber compounds.

In addition to brownfields connected directly to the chemical industry within the Kanawha Valley, subsequent brownfields are also present that are likely contributors to the overall health problems associated with the area. Two coal burning electric power plants are in the valley, including the John Amos facility with an output capacity of over 2,800 megawatts, one of the largest in the world. The other facility, the Kanawha River plant, is an older design that is scheduled for decommissioning within the next year. Other industries that may be contributing to environmental issues present in the valley include closed landfills (examples include City of Nitro and Union Carbide's South Charleston facility), and three congested Interstate systems (I-64, I-77, I-79) that extend through the valley. Information from EPA's "Envirofacts" website (www.epa/gov/enviro/facts) clearly documents the elevated number of sources that are potentially contributing to environmental and related health problems, including:

- 120 registered air emission sites (Air Facility System reporting)
- 54 toxic release sites (Toxic Release Inventory reporting)
- 16 CERCLIS sites
- 1,293 RCRA hazardous waste sites
- 3,283 permitted water discharge sites (Permit Compliance System) either direct discharge to the Kanawha River, or tributary discharges to the Kanawha River

West Virginia ranks 3rd highest in cancer mortality rates among the states. Between 2006 and 2010, the average annual age-adjusted mortality rate for cancer deaths in West Virginia was 201.2 (deaths per 100,000), well above the national average of 176.4 for the same period. In Fayette County, the cancer death rate is much higher, documented at 223.4

(<u>http://statecancerrofiles.cancer.gov/cgi -bin/deathrates</u>). The State's cancer incidence rate is 486.8, again higher than the national average of 470.1. Fayette County, located in the center of the target area, is even higher, at 499.7, potentially connected to the many historical petroleum locations that existed in the area (<u>www.cancer.gov/cancerpics/factsheet/disparities/cancer -health-disparities</u>).

Lung cancer has the second highest cancer incidence rate in the State for males and females, at 93.35 per 100,000 population. In the three counties that comprise the target area, lung cancer rates are rising faster than the U.S. average (www.statecancerprofiles.cancer.gov/cgi - bin/ratetrendbycancer/rtcancer). While several factors contribute to the number of cancer cases, exposure to known cancer-causing chemicals is of definite consideration. Storage and use of petroleum-based chemicals and products with carcinogenic substances, found in gasoline and diesel fuel, have historically abounded in the target area among the local target communities.

Birth defects, most often connected with toxic substances containing heavy metals, is prevalent in the area. In Fayette County, the center of the target area, 62 birth defects per 1,000 live births have been recorded, which according to WV Health and Human Resources, are the highest in the State (www.wvdhhr.org/bph/oehp/hsc/briefs/six)). While lead is no longer used in gasoline products, its historical use in gasoline is a likely contributor to the extremely high birth defect rates found in the area.

c. Financial Need

i. Economic Conditions

As previously stated, our focus area lies within the Kanawha Valley chemical corridor in counties impacted by the January 9th chemical spill on the Elk River. During the aftermath of the spill, restaurants, hotels, and other businesses were forced to close, many for close to a week, resulting in significant lost revenue. This loss of revenue rippled through the community to local governments, and Charleston's Finance Director estimates that the capital city could lose more than \$120,000 in revenue due to the water outage, and the potential for long-term revenue loss remains as agencies and experts work to assess the longer effects of the leak. ¹

In addition to the recent losses due to this chemical spill, the Kanawha Valley has been facing continued population losses, due primarily to the closing, down-sizing, or movement of jobs to other countries by chemical companies, for six decades. Many of the high paying chemical industry jobs with excellent benefits are gone. Some employees have found employment in service sector jobs, normally including low wages and minimal benefits. These circumstances have resulted in reduced taxes and availability of services provided by the smaller towns and communities. Smaller towns have been faced with budget cuts and revenue shortfalls on a regular basis, resulting in reduced staff, with many positions either eliminated or placed on part-time employment status.

The communities in the Chemical Valley were already struggling to find adequate resources to provide necessary services. The chemical spill and the uncertainty associated with the short term costs of water clean-up, as well as the long term costs associated with the installation of water system safety upgrades poses a huge financial strain on the local governments. There is also a

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As quoted in the Charleston Daily Mail on January 20, 2014: http://www.charlestondailymail.com/News/Kanawha/201401190108

potential for significant long term loss of tourism, and related investment dollars in the impacted region.

ii. Economic Effects of Brownfields

The numerous brownfields within the Kanawha Valley, primarily connected to the chemical industry down-sizing, facility closures and out-of-country moves, are prominent throughout the area. In addition to the continually reducing populations, lost jobs, reduced income levels and associated poverty rates are causing reduced tax bases for the affected local community governments. As the tax base is reduced, local government services are reduced as well, decreasing community vitality. Former chemical industrial properties, though situated in local communities at excellent business locations, are rarely considered for new business development, due to contamination, or perceived contamination, and associated liabilities.

2. Project Description and Feasibility of Success

a. Project Description

On January 10, 2014 a chemical spill of 4-Methylcyclohexane Methanol (MCHM), was confirmed to have contaminated the Elk River of West Virginia. This environmental catastrophe made the water of 300,000 residents in nine West Virginia counties undrinkable for more than one week. Approximately 7,500 gallons leaked from the Freedom Industries facility on the Elk River 1.6 miles upstream from the drinking water intake of West Virginia American Water. This chemical is an organic compound classified as an alcohol which generates bubbles in the froth floatation process to help clean coal impurities. MCHM is known to be a skin, eye, and lung irritant. The grant would be administered via WVDEP with input from government agency partners and community stakeholders.

DLR will be able to complete this project within the 3-year timeframe. This will be accomplished using our existing experienced internal resources dedicated to this project, plus utilizing existing and upcoming renewable contractual agreements with qualified and experienced environmental firms for environmental assessment activities. Our on-going relationship with the West Virginia Brownfield Assistance Centers and their resources to augment the project will also be utilized. These Centers are State-mandated programs, operating since 2005, and are experienced in assisting communities and organizations in the successful and timely completion of assessment, cleanup and redevelopment activities at brownfield properties across the State, including use of EPA brownfield assessment grants.

b. Task Description and Budget Table

i. <u>Task Description</u>

The primary goal of this proposed effort is to assess communities impacted by the contamination of the Elk River and associated water supplies as a result of the MCHM chemical spill. Our approach to successfully implementing and completing this project is based on four specific tasks, as follows:

Task 1 – Programmatic Oversight: \$35,000

WVDEP is requesting 10%, or \$35,000, of the proposed budget to support eligible programmatic costs, as outlined in EPA Brownfields application guidelines. DLR will utilize internal to perform activities within this task, which will include: financial management and accounting to meet EPA reporting requirements, hiring and associated management of contractor(s) during project timeframe, project monitoring to ensure the project is moving forward at a reasonable pace to complete tasks within the 3-year timeframe, and preparing / managing public meeting notices and information, response to citizen and community comments, and email/web-based information outreach. Task outputs projected include 12 quarterly reports. The DLR will utilize other funds for travel to participate in state and national brownfield conferences.

Task 2 – Health Monitoring: \$35,000

WVDEP plans to use the maximum allowable 10% of the grant funds for health monitoring in the areas impacted with the chemical spill. Health monitoring grant may include "the collection of health-related qualitative and quantitative data of relevance to brownfield communities and hazardous substance exposures" (EPA Brownfields & Public Health Monitoring Fact Sheet). Due to the nature of the spill and its broad impact on community water supplies, this kind of health monitoring is an important piece of the assessment work planned for this project. The WVDEP will work with local and state health and safety agencies to define and develop appropriate health monitoring procedures and processes for communities affected by the leak. The amount of EPA funding requested for this task is \$35,000 or 10% of the grant as allowed under the grant guidelines.

Task 3 - Phase II Environmental Site Assessments: \$225,000

WVDEP plans to work with qualified contractors, environmental experts and community stakeholders to identify appropriate water and soil sampling locations to provide information and awareness of potential contamination of property and drinking water supplies caused by the chemical spill. As required under WV's EPA approved Brownfields Program, Quality Assurance Project Plans (QAPP), a site-specific Sampling and Analysis Plan (SAP), and Health and Safety Plan (HASP) will be developed for all sampling events. Based on estimates from the West Virginia Water Research Institute sample costs will range from \$65 - \$150 per sample based on the needed detection limit for crude MCHM (the chemical which was spilled). With a need to test throughout the water distribution system over a nine county area, WVDEP is estimating approximately 1000 water samples (@\$150 per sample for analysis) totaling \$150,000 for lab costs. With associated staffing and expertise needed to create the sampling plans, collect the samples and provide reports, an additional \$75,000 in contractual services is requested under this task.

Task 4 – Community Outreach: \$65,000

WVDEP is requesting \$65,000 for community engagement activities related to the spill. DLR will utilize a combination of internal resources, and external consultants, and community partners to perform activities within this task The DLR and its supporting partners, are actively engaged in discussing strategies to engage community stakeholders impacted by the schemicla spill. This task will augment and support discussions and activities already in progress. Project support partners will be our major avenue for project discussion and information dissemination. Applicable materials and public documents will be available via DLR and partnering entity websites, and via individual community meeting handouts where priority sites are located. Using our Public Relation Department's experience in creating public information materials,

communication documents will be written in simplified, easy-to-understand language. Since over 99% of the population in the area speaks English as a primary language, we do not anticipate the need of providing materials in other languages, but have internal resources available to accommodate any language barriers that may arise. Project point-of-contact information will be provided to allow access for members of the various partners and associated community groups, and the general public, to ask questions, express concerns, and provide input. The budget request for this task is \$20,000 for supplies and materials to be used in the engagement process over the nine counties, as well as \$40,00 in contractual costs for civic engagement professionals, and \$5,00 for internal project staff. Associated travel, supplies, and additional labor, will be provided by DLR and/or our partnering groups as in-kind project contributions.

ii. Budget Table

Budget Category					
(programmatic costs only)	Programmatic Oversight	Health Monitoring	Phase II Assessments	Community Engagement	Total
Personnel	\$35,000	-	-	\$5,000	\$40,000
Fringe Benefits	-	-	-	-	-
Travel ¹	-	-	-	-	-
Equipment	-	-	-	-	-
Supplies	-	-	-	\$20,000	\$20,000
Contractual	-	\$35,000	\$225,000	\$40,000	\$295,000
Total	\$35,000	\$35,000	\$225,000	\$65,000	\$350,000

c. Ability to Leverage

The DLR has a number of programs under its direction that can provide multiple resources to augment this project, especially in the event additional assessment and/or clean-up work is required. One program with staff and resources available that may specifically augment this project is:

• Rehabilitation Environmental Action Plan, including Pollution Prevention Program, state funded - to provide potential resources and staff for general solid waste removal from abandoned properties, including open dumps, vacant lots, and abandoned properties.

Labor and associated travel, equipment and supply costs from our various participating program agencies will be provided as in-kind contributions to the project, and are estimated at a minimum of \$50,000, but may include additional monies from funded programs. The DLR will also be

able to leverage a substantial amount of additional program resources in connection with this brownfield assessment grant program. Our programs mentioned previously have state and federal funding components, many of which may be potentially used in conjunction with this proposed application. Where applicable and allowable within specific program rules, we will be able to provide extensive leveraged funds to ensure project success.

We also will be working in conjunction with a diversified group of entities to assist local communities within the Kanawha Valley in identifying and applying for applicable funding resources. Potential funding sources for these small communities that we have identified and communicated with include one private foundation, multiple state programs, and one non-profit community assistance program.

Our cooperative partners on this specific project include the West Virginia Brownfield Assistance Centers, state-mandated centers at West Virginia University and Marshall University, that provide assistance to communities throughout the State on brownfield redevelopment projects, including community outreach support, site inventory, site evaluation and priority site ranking assistance, project liaison with EPA Region III brownfield personnel, and project management coordination and assistance. Leveraged support from the West Virginia Brownfield Assistance Centers is estimated at \$30,000 for labor and travel over the three-year project period. **Total current leveraged support is estimated at a minimum of \$30,000**, with the strong likelihood of considerable additional resources, based on project-specific needs.

3. Community Engagement and Partnerships

a. Plan for Involving Targeted Community, Stakeholders; and Communicating Project Progress

Due to an extensive number small towns plus unincorporated communities in the targeted area of the Kanawha Valley, our plan for community engagement in our target area includes the use of our supporting government and community organizational network, described in Section 3b and 3c, who jointly are consistently engaged with these many municipalities, and will assist with timely interaction and meaningful community participation. While the DLR will be using its public relations office and website for project information distribution, we believe using this supporting network will canvas the target area more effectively to provide all communities the opportunity to actively participate in inclusion of community needs while addressing project planning and implementation activities.

b. Partnerships with Government Agencies

The West Virginia Department of Environmental Protection (WVDEP) provides the state's environmental oversight. WVDEP operates and regulates according to environmental laws adopted by the United States Congress and the West Virginia Legislature. Agency divisions, including the Division of Air Quality, Division of Land Restoration, Division of Mining and Reclamation, and Division of Water and Waste Manage, coordinate efforts to promote a healthy environment for citizens of West Virginia.

The Division of Land Restoration works closely with the other WVDEP divisions to gather brownfield site information such as ownership, regulatory history, and existing permits. Personnel from other divisions also provide technical support and guidance to assist with assessment and cleanup activities. Together, DLR and other divisions address groundwater, water quality, and solid and hazardous waste issues that are present on brownfield sites.

WVDEP collaborates with the Office of Environmental Health Services at the West Virginia Department of Health and Human Resources (WVDHHR). WVDEP and WVDHHR share expertise and support to address environmental contaminant matters at locations where public health and safety issues are of concern.

WVDEP has established a Memorandum of Agreement (MOA) with the West Virginia Development Office (WVDO) to enable environmental remediation of brownfield properties in West Virginia into economically feasible development sites. The MOA is a mutual commitment by the agencies to promote and coordinate cleanups and redevelopment of brownfield sites to benefit the quality of life in the state. Recognizing that effective cooperation to identify, remediate, and redevelop brownfield sites will significantly enhance their respective agency missions, WVDEP and WVDO coordinate the identification, location, and characterization of brownfields throughout West Virginia; promote the remediation and redevelopment of brownfield sites; and exchange information and awareness for the management and redevelopment of brownfield sites. WVDEP frequently provides information on potential brownfield sites to WVDO for their review and prioritization of ties for development potential. WVDO serves as a point of contact with regional planning and development councils and local development agencies and authorities.

The WV Department of Health and Human Resources has also committed to supporting this project and has been actively involved in the recovery of the community impacted by the chemical release on January 9th, 2014. The DHHR is aware that the area and impacted brownfield sites will need significant environmental assessment, monitoring, and screening, and is committed to providing its support to ensure that the health and human safety of impacted communities is not compromised.

Organization	Contact	Description & Role in Project		
Division of Land Restoration, WV Department of Environmental Protection	Patty Hickman Patricia A Hickman@wv.gov 304,238.1220 x3517	The Division of Land Restoration (DLR) at the WVDEP manages the remediation of lands that have been environmentally contaminated. The DLR will provide ongoing support and environmental expertise as the City administers this Assessment Grant.		
WV Department of Health and Human Resources	Walter Ivey <u>Walter.M.Ivey@wv.gov</u> 304.356.4272	The WV DHHR will be engaged to provide redevelopment input and community data from the perspective of local health and safety.		

c. Partnerships with Community Organizations

Due to the immediacy of the spill (only two weeks prior to this project application), community support for this assessment project is currently underway. The WV DEP's efforts will include significant community outreach and identification of community organizations as key project stakeholders. The Brownfield Assistance Centers will provide support through their existing local networks and effective model of community stakeholder engagement.

Community stakeholder groups will play key roles in this project and will be engaged at each phase. Organizations will be solicited to provide project input and feedback, help identify potentially contaminated sites for assessment, participate in re-use planning workshops, and provide community input during redevelopment planning. The WV DEP will seek to partner with a wide variety of community organizations, including but not limited to: watershed groups, Main Street and Street Scape downtown redevelopment organizations, local fire and police organizations, and groups representing community constituencies such as churches and service-based organizations (Rotary Club, Kiwanis, etc.). Community meetings will be held regularly in those communities impacted by the brownfield sites, which will provide an avenue to discuss project updates and receive feedback from community organizations.

4. Project Benefits

a. Health and/or Welfare and Environment

Funds will be used to identify actual petroleum-related threats to human health and the environment within the target area communities from all environmental media. Identification of exposure pathways and quantifying risks posed to any identified sensitive populations or other receptors. The many small communities in the target area don't have the capacity to manage an assessment grant of this type, but blight and abandoned properties create additional economic burden. Contamination doesn't always remain on the source property, so preventing the spread of contamination is of paramount importance to the DLR. While contaminants can migrate via several mechanisms, groundwater contamination is a serious environmental threat to these communities, due to groundwater resources being a main source of water supply.

Site-specific information gained from assessment efforts will assist communities in understanding potential threats, and how to manage them effectively. Removal or proper treatment of contamination will nullify these threats, paving the way for new development and associated improvements in the community. On sites where no contaminants have been detected, these sites can then be "fast-tracked" toward productive reuse.

Social benefits of these efforts are extensive, including re-energizing stagnant communities for future progressive initiatives, initiation of green space and recreational development to enrich community lifestyles, and realization of new development options available to promote sustainable businesses and communities. These types of benefits will help revive these communities impacted from decades of mining industry job loss and associated population losses, blighted by the resulting abandoned, idled and under-utilized properties. Assessment results will be used to prompt remediation and assist in leveraging other resources to ultimately return these negative properties to safe use to stimulate the local economy in terms of job creation and increased revenue. Redeveloped properties can serve as a catalyst for redevelopment of surrounding sites, increasing community sustainability and vibrancy. Resulting public health benefits include elimination of health risks associated with surface and subsurface contaminants on brownfield properties. Physical health risk will be minimized with ultimate removal of any dilapidated buildings associated with these properties. Sensitive and nearby populations will obtain increased protection from contaminants via community interaction from the support partner working group. Communities will become better informed and able to take appropriate precautions while sites are assessed and ultimately remediated for new use.

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b. Environmental Benefits from Infrastructure Reuse/Sustainable Reuse

Chemicals are in everything we use. These chemicals need to be produced and stored somewhere. The continued use of existing chemical facilities in the Kanawha Valley is the most sustainable reuse of the substantial industrial complex which already exist in the region. Additional awareness about the existing facilities will lead to infrastructure upgrades for human and environmental safety at a significantly reduced cost to building new facilities on green fields in other areas of the state or country.

c. Economic Benefits

The assessment of perceived contaminated water supplies, and soils, along with a robust community engagement plan will help to reduce the negative perception which now hangs like a cloud over the impacted region. This grant will encourage retention of jobs, and investment in the Chemical Valley to offset the significant potential for disinvestment and population flight over environmental perceptions.

5. Programmatic Capability and Past Performance

a. Programmatic Capability

The Division of Land Restoration (DLR) at the West Virginia Department of Environmental Protection (WVDEP) will administer the grant. DLR manages several millions dollars in federal and state program grants each year. In the past four years, DLR has successfully managed over \$102,000,000.00 in federal grants and state funds, including \$2,000,000.00 in U.S. EPA Brownfields Program funding.

Bryan Arthur, an environmental professional and WVDEP program manager with fifteen years of grant management experience, will serve as the Grant Coordinator. Mr. Arthur has managed all federal grants and state funds for the Office of Environmental Remediation (OER) within the Division of Land Restoration since 2010. These include federal grants for the Leaking Underground Storage Tank Program, Brownfield State Response Program, and Superfund/CERCLA Program. Mr. Arthur will be responsible for all grant management activities including approving and submitting action plans and specifications, submitting quarterly reports, tracking progress towards meeting project goals, and entering data into the U.S. EPA ACRES database.

WVDEP will coordinate with the West Virginia Brownfields Assistance Centers at Marshall University and West Virginia University for the duration of the grant. Since 2005, the Brownfields Assistance Centers have been promoting economic development and environmental and public health protection through innovative redevelopment of brownfield sites. The Centers also coordinate the development of brownfield property by providing training and technical assistance, facilitating site preparation efforts, and engaging community involvement. The Brownfields Assistance Centers will facilitate community engagement; act as a liaison between WVDEP and project stakeholders; assist in identification of appropriate sites for assessment; and work in partnership with WVDEP to warrant timely and successful expenditure of funds.

Upon site selection, one of the nine full-time WVDEP Project Managers will be assigned to each assessment. WVDEP Project Managers have backgrounds in biology, chemistry, engineering,

environmental studies, and geology. As Project Managers for the West Virginia Voluntary Remediation Program and past U.S. EPA Brownfields Program grants, they have extensive experience in site-specific brownfields assessments. WVDEP Project Managers will provide technical oversight of site assessments and ensure that assessments are performed in compliance with the WVDEP Quality Assurance Project Plan.

Qualified environmental consultants will be contracted to perform Phase II Environmental Site Assessments and any environmental sampling. Consultants will be hired in accordance with Competitive Procurement Standards 40 CFR Part 31.36 and the State of West Virginia's Purchasing Division's procedures for the purchase of services through the WVDEP Procurement Division. All work proposals will be reviewed and authorized by the DLR Contract Specialist, Nathan Meadows.

Grant compliance and progress will be monitored through WVDEP's existing financial and project management systems. The electronic Financial Information Management System (FIMS), the State of West Virginia's centralized accounting program, will be utilized to track accounting transactions, analyze expenditures, monitor the balance of the grant budget, and produce financial reports, as well as ensure compliance with grant terms and conditions. In addition, the Grants Section within the WVDEP Fiscal Services Department will provide regular internal monitoring and reconciliation. The WVDEP project and permit database, Environmental Resource Information System (ERIS), will be utilized to track site geography, history, ownership, and pictures. All tasks and activities performed on the site will be recorded within the database to provide an outline of the site's progress.

b. Audit Findings

The West Virginia Department of Environmental Protection has never received an adverse audit finding.

c. Past Performance and Accomplishments

The West Virginia Department of Environmental Protection has received two recent U.S. EPA Brownfields grants, one of which is currently open.

Grant Period	Brownfields Grant	Amount	Expenditures	Funds Remaining
October 1, 2009 - September 30, 2013	Assessment – Hazardous Substances BF-97383801	\$200,000	\$168,140.68	\$31,859.32
October 1, 2010 - September 30, 2014	Assessment – Petroleum BF-97398701	\$200,000	\$122,294.97	\$77,705.03 (committed)

1. Compliance with grant requirements

WVDEP has a history of satisfactory compliance with all U.S. EPA brownfield grant requirements, including work plans, schedules, and terms and conditions. Progress is achieved in a timely manner and documented through punctual and thorough quarterly progress reports, annual financial status reports, and continuous ACRES reporting.

WVDEP has demonstrated fiscal responsibility with previous U.S. EPA brownfields grants. The Hazardous Substances Assessment Grant awarded in 2009 ended on September 30, 2013, with a balance of \$31,859.32. This balance was due to the lack of an allotment for fringes for salaries in the initial agreement. The Petroleum Assessment Grant awarded in 2010 has a balance of \$77,705.03 and will end on September 30, 2014. The entirety of that grant has been committed to scheduled site assessments and salaries. Additional funding is being requested to assess another area of West Virginia recently impacted by an environmental disaster.

2. Accomplishments:

Grant Period	Brownfields Grant	Phase I ESAs	Phase II ESAs	Asbestos Inspections
October 1, 2009 - September 30, 2012	Assessment – Hazardous Substances BF-97383801	10	1	2
October 1, 2010 - September 30, 2014	Assessment – Petroleum BF-97398701	0	3	0

The Hazardous Substance Assessment Grant awarded in 2009 was used to complete ten Phase I Environmental Site Assessments, one Phase II Environmental Site Assessment, and two asbestos inspections. This enabled one entity to apply and receive an EPA cleanup grant and others to begin planning redevelopment.

The Petroleum Assessment Grant awarded in 2010 has been used to assess sites along the historic Midland Trail (U.S. Route 60). Environmental assessment activity has been conducted at three sites, and abounded underground storage tanks were removed at two of the sites to ensure a more complete assessment. This enabled some of the entities to begin planning redevelopment at the sites.

THRESHOLD CRITERIA

1. Applicant Eligibility

The West Virginia Department of Environmental Protection's Office of Environmental Remediation (hereafter, "WVDEP-OER") is a General Purpose Unit of Local Government and meets eligibility requirements of the Small Business Liability Relief and Brownfields Revitalization Act, and as a local government or quasi-governmental entity that operates under the supervision and control of a local government, per 40 CFR Part 31.

2. Letter from the State or Tribal Environmental Authority

The WVDEP-OER is recognized as the state's brownfields environmental authority. Therefore, no support letter is required to acknowledge that the WVDEP plans to conduct assessment activities and submit the attached application for federal grant funds.

3. Community Involvement

On a site-by-site basis, the WVDEP-OER will inform, involve, and request community participation in upcoming grant planning, implementation, and assessment activities and meetings through Public Notice, as appropriate, in the local newspapers that cover the geographic region for each selected brownfields site throughout the grant cycle.

The WVDEP-OER will also ask appropriate City and County officials to place notification on council and meeting agendas to inform and gather stakeholder and resident input in the geographic region on a site-by-site basis throughout the grant cycle.

The WVDEP-OER will also utilize the State Journal, a weekly general news and business newspaper with statewide distribution, to provide broader notification, if necessary during the grant cycle.

The WVDEP-OER will coordinate with the Northern WV Brownfields Assistance Center (hereafter, "NBAC") to utilize the West Virginia Brownfields Assistance Centers' website at www.wvbrownfields.org and brownfields outreach email list to provide notification, as appropriate, of upcoming grant planning, implementation, and assessment activities on a site-by-site basis throughout the grant cycle.

The WVDEP-OER will also work with the NBAC to identify any potential stakeholders who have not yet been engaged and to conduct outreach with them. Potential stakeholders include neighborhood associations, citizen groups, local businesses, property owners, developers, and other interest groups (such as recreation groups). Statewide stakeholders include the the State Historic Preservation Office, the WV Development Office, and the Department of Commerce. The WVDEP-OER will work with all of these groups to provide regular project updates and to solicit input throughout the grant period.

4. Site Eligibility and Property Ownership Eligibility (Site-Specific Proposals Only)

Site Eligibility:

a. **Basic Site Information.** The Elk River Spill Site is a large, currently undefined (due to recent contamination concerns and lack of information) acreage area along the Elk River impacting 9 WV counties and 300,000 residents in the area surrounding the Freedom Industries Facility in Charleston, WV. The site is located throughout Kanawha, Boone, Cabell, Clay, Jackson, Lincoln, Logan, Putnam, and Roane Counties. The primary location's zip code in Kanawha County is 25311. The site has a large number of owners, currently unidentified, due to the nature of the recent contamination.

b. Status and History of Contamination at the Site.

The site is contaminated by hazardous substances. The contaminating property is a chemical substances storage facility and the site operational history is varied, including mixed use residential, commercial, and industrial properties. Environmental concerns include contamination by 4-Methylcyclohexane Methanol (MCHM), although other potential concerns are not yet known. The site became contaminated due to a chemical spill of MCHM. The nature and extent of contamination is currently being researched by WVDEP and WVDHHR.

c. Sites Ineligible for Funding.

The site is not listed or proposed for listing on the National Priorities List, is not subject to unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees under CERCLA. The site is not subject to the jurisdiction, custody, or control of the U.S. government.

d. Sites Requiring a Property-Specific Determination.

The site does not require a property-specific determination.

Property Ownership Eligibility (for site specific proposals)

e. CERCLA § 107 Liability.

The WV DEP is not potentially liable for contamination at the site under CERCLA §107 because the WV DEP has had no previous involvement in any site activities, contributing contamination activities, or site ownership. The WV DEP is not the current or previous owner of the site.

f. Enforcement or Other Actions.

The site is not under any ongoing or anticipated environmental enforcement or other actions related to the impacted brownfield site, the Elk River Spill Site, for which funding is sought.

g. Information on Liability and Defenses/Protections Where Applicant Does NOT Own the Site.

- i) The WV DEP affirms that it did not arrange for the disposal of hazardous substances at the site or transport hazardous substances to the site, and that it did not cause or contribute to any releases of hazardous substances at the site
- ii) The WV DEP has no relationship with the property owners.
- iii) The WV DEP will work closely with property owners to gain site access and involve property owners in assessment activities to the extent allowable.
- h. Information on Liability and Defenses/Protections Where Applicant Owns the Site or Will Own the Site During the Performance of the Grant.

 The WV DEP does not currently and has not previously owned the site to be assessed and has no plans to own the site at any point during the performance of the grant.

Request for Waiver of the Funding Limit

Site Description

The spill occurred from a liquid bulk storage and distribution facility on the Elk River 1.6 miles upstream from the drinking water intake of West Virginia American Water. Due to the nature of the spill, the contamination spread through the Elk River into nine counties in the Kanawha Valley.

Site Contamination

The Elk River was contaminated by 4-Methylcyclohexane Methanol (MCHM), a surfactant used in coal preparation. According to WVDEP, approximately 7,500 gallons were leaked from a storage tank in Charleston, WV. MCHM is an organic compound classified as an alcohol which generates bubbles in the froth floatation process to help clean coal impurities. MCHM is known to be a skin, eye, and lung irritant. Contamination was exacerbated when the leak flowed into the water intake of West Virginia American Water, impacting 300,000 residents in nine West Virginia counties.

Size of the Site

The contamination affected 9 counties and roughly 300,000 residents.

Reasons for requesting additional funding

Information regarding the impact of the spill is continuously being corrected and released. Depending on the MCHM water concentration limit for safe human consumption yet to be determined by the Centers for Disease Control, water sample analytical costs are estimated between \$65 and \$150 per sample, according to the WV Water Research Institute. In addition to there being little scientific data about MCHM, it was very recently reported that a mixture of polyglycol ethers comprised 5% of the leaked substance. Little is known about the long-term health impacts of this chemical as well. Due to the large impact of the leak, the cost of assessment and health monitoring of the contaminated Elk River is expected to exceed the limit of \$200,000.

Other Factors Checklist

Please identify (with an X) which, if any of the below items apply to your community or your project as described in your proposal. To be considered for an Other Factor, you must include the page number where each applicable factor is discussed in your proposal. EPA will verify these disclosures prior to selection and may consider this information during the selection process. If this information is not clearly discussed in your narrative proposal or in any other attachments, it will not be considered during the selection process.

Name of Applicant: WV Department of Environmental Protection

	Other Factor	Page #
	Community population is 10,000 or less	
	Federally recognized Indian tribe	
	United States territory	
	Applicant will assist a Tribe or territory	
	Targeted brownfield sites are impacted by mine-scarred land	
	Targeted brownfield sites are contaminated with controlled substances	
X	Recent natural disaster(s) (2006 or later) occurred within community, causing significant community economic and environmental distress	2
X	Project is primarily focusing on Phase II assessments.	7
	Applicant demonstrates firm leveraging commitments for facilitating brownfield project completion by identifying amounts and contributors of funding in the proposal and have included documentation	
	Community experienced manufacturing plant closure(s) (2008 or later) tied to the targeted brownfield sites or project area, including communities experiencing auto plant closures due to bankruptcy or economic disruptions.	
	Recent (2008 or later) significant economic disruption (unrelated to a natural disaster or manufacturing/auto plant closure) has occurred within community, resulting in a significant percentage loss of community jobs and tax base.	
	Applicant is a recipient or a core partner of a HUD-DOT-EPA Partnership for Sustainable Communities (PSC) grant that is directly tied to the project area, and can demonstrate that funding from a PSC grant has or will benefit the project area. To be considered, applicant must attach documentation which demonstrates this connection to a HUD-DOT-EPA PSC grant.	
	Applicant is a recipient of an EPA Brownfields Area-Wide Planning grant	
	Community is implementing green remediation plans.	
	Climate Change (also add to "V.D Other Factors")	



STATE OF WEST VIRGINIA
OFFICE OF THE GOVERNOR
1900 KANAWHA BOULEVARD, EAST
CHARLESTON, WV 25305
(304) 558-2000
January 22, 2014

EARL RAY TOMBLIN

Ms. Patricia Hickman, Interim Director Division of Land Restoration West Virginia Department of Environmental Protection 601 57th Street SE Charleston, West Virginia 25304-2345

Dear Ms. Hickman:

I fully support the West Virginia Department of Environmental Protection's application to obtain funding for assessment of the Kanawha Valley community recently affected by the Elk River chemical spill.

Since the 7,500-galllon spill of 4-methylcyclohexane methanol (Crude MCHM and PPH, stripped) into the Elk River on January 9, 2014, approximately 300,000 residents and several businesses within nine counties of West Virginia have been affected. I declared a State of Emergency for these counties and mobilized all appropriate government assets and resources to provide immediate assistance for West Virginia's residents; however, additional work must take place to evaluate the extent of contamination, protect the environment, and ensure the long-term health and safety of residents.

This funding will provide an essential assessment of the immediate contaminated area and any impacted areas associated with the spill, as well as vital community monitoring and screening to determine long-term effects for the impacted region.

I pledge my full support and assistance with the activities proposed within this grant application and look forward to working with the Department of Environmental Protection and the Department of Health and Human Resources Bureau of Public Health.

Sincerely,

Earl Ray Tomblin

Governor

ERT:ph:bln

United States Senate

WASHINGTON, DC 20510-4802

January 21, 2014

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Ms. Patty Hickman Director Division of Land Restoration West Virginia Department of Environmental Protection 601 57th Street, Southeast Charleston, West Virginia 25304-2345

Dear Patty.

Thank you for requesting my support for the United States Environmental Protection Agency, Brownfields Site-Specific Hazardous Substances Grant application being submitted by the West Virginia Department of Environmental Protection, Division of Land Restoration. I am happy to support your application.

This important funding will be used to for extensive environmental monitoring and screening to determine the long term effects in the community immediately surrounding the Freedom Industries plant in Charleston, the site of a recent chemical spill. As you know, this chemical spill contaminated the water supply in nine counties, which was devastating to residents and businesses throughout the Kanawha Valley region and adjoining communities. I hope your application will be given the utmost consideration.

Once again, Patty, thank you for requesting my support. I would like to be helpful in any way I can. Please be in touch if you need anything at all.

Sincerely,

John D. Rockefeller IV

http://ockefelter.senais.gov



STATE OF WEST VIRGINIA DEPARTMENT OF HEALTH AND HUMAN RESOURCES BUREAU FOR PUBLIC HEALTH OFFICE OF ENVIRONMENTAL HEALTH SERVICES

Earl Ray Tomblin Governor Karen L. Bowling Cabinet Secretary

January 22, 2014

Ms. Patty Hickman, Interim Director
West Virginia Department of Environmental Protection
Division of Land Restoration
601 57th Street, SE
Charleston, West Virginia 25304

RE: EPA Brownfields Site-Specific Hazardous

Substances Grant Application

Project Support for the Elk River Chemical Spill

Dear Ms. Hickman:

The West Virginia Department of Health and Human Resources, Bureau for Public Health, Office of Environmental Health Services has been actively involved in the recovery following the release of approximately 6,000-gallons of 4-methylcyclohexane methanol (Crude MCHM) into the Elk River that occurred on January 9, 2014. This event has been devastating to businesses and residents throughout the Kanawha Valley and the surrounding areas. The impact to the region's drinking water source has affected approximately 300,000 residents. The entire area is going to need extensive environmental monitoring and screening to determine the long-term effects of this spill.

The Office of Environmental Health Services supports your program obtaining this funding to provide much needed work in this area. This will provide relief to the residents within the impacted area to know that this work was accomplished.

The Office of Environmental Health Services will work with your staff throughout the duration and successful completion of this project. We welcome the opportunity to aid in the support of this project.

Very truly yours,

Walter M. Ivey, Director

Office of Environmental Health Services



CENTER FOR ENVIRONMENTAL, GEOTECHNICAL, AND APPLIED SCIENCES

Gullickson Hall 112, One John Marshall Drive, Huntington, West Virginia 25755-2585 Tel: 304/696-5453, Fax: 304/696-5454

January 21, 2014

Patty Hickman, Director West Virginia Department of Environmental Protection Division of Land Restoration 601 57th Street, SE Charleston, WV 25304

RE: EPA Brownfields Site-Specific Hazardous Substances Grant Application

Elk River Chemical Spill and Affected Area

Pledge of Project Support

Dear Patty,

The West Virginia Brownfields Assistance Center at Marshall University (BAC) is proud of our enduring partnership with The WVDEP's Division of Land Restoration. We've been able to collectively work on several brownfield sites of various types across the State, from former rail corridors to service stations, from former surface mine lands to closed industrial facilities. We're especially pleased with our partnering efforts on past EPA brownfields grants, both on grants directed by your office, and on grants conducted by our many past and current EPA Brownfield grant holders.

As we're all aware, the release of 7,500 gallons of 4-methylcyclohezane (MCHM) into the Elk River that occurred on January 9th of this year has been devastating to businesses and residents throughout the Kanawha Valley and surrounding area. When a region's drinking water source has been impacted, it's a problem of huge magnitude. West Virginia American Water Company estimates 300,000 people were affected. Even now, more than 2 weeks later, effects of the spill are still quite prominent. Businesses have been closed with income and wages lost, and residents have been relying on water stations for their drinking water needs. The Centers for Disease Control and Prevention has issued cautions for pregnant women and young children in the impacted area on consuming tap water, even though the water use ban has now been lifted. The entire area is going to need extensive environmental monitoring and screening to determine the long-term effects of this spill.

The BAC's work in the Kanawha Valley has produced excellent working relationships with numerous government and community-based organizations. With this extensive number of cooperating entities already established, combined with your resources and our experience in the region, we're confident that your proposed EPA Brownfields site-specific hazardous substance grant will without question be welcomed in the affected area.

The BAC is committed to providing you staff and resources we have available throughout the duration and successful completion of this project. We welcome the opportunity to play a role as a local community liaison, and we will readily interact with the many partners already dedicated to support of this project.

While this unfortunate chemical spill has caused tremendous economic and environmental hardships on the region, we're confident that, under the direction of you and your office, we'll jointly be able to help these affected communities in many positive ways through your proposed efforts. We're here to help in any way possible, and look forward to our continued partnership and successes on brownfield redevelopment projects throughout West Virginia in the coming months.

Most Sincerely. George

George Canco

Director, WV Brownfields Assistance Center at Marshall University

Environmental Manager, Marshall University CEGAS

One John Marshall Drive Huntington WV 25755-2585 304/696-5456

canco@marshall.edu